WHAT IS CLAIMED IS:

1.   A computer implemented method of automatically generating Electronic Data Interchange (EDI) documents or messages using an EDI system, comprising:

receiving a source data model having a first EDI format corresponding to EDI related data, the source data model including metadata;

mapping the metadata of the source data model to corresponding variables of a virtual document; and

mapping the variables of the virtual document to metadata of a target data model having a second EDI format.

2.   The method according to claim 1, wherein, when a source message or document is inputted to the EDI system, the source message or document is translated to obtain its corresponding metadata, and the values corresponding to the metadata are provided to the corresponding mapped variables of the virtual document at run time, and

wherein the corresponding values of the mapped variables of the virtual document are provided to the corresponding metadata of the target data model, so as to populate the target data model with data from the source data model.

3.   The method according to claim 2, wherein the first EDI format is a data transaction formatting standard, and the second EDI format is a data transaction formatting standard.

4.   The method according to claim 2, wherein the variables of the virtual document are assigned semantic names representative of a type of data to be stored to the variables.

5.   A system for automatically generating data in a self-describing markup language format from received EDI data, comprising:

a receiving unit that receives a message or document from a first trading partner as EDI data;

a virtual document that maps metadata from the message or document of the first trading partner to variables of the virtual document, and that maps metadata from a message or document of a second trading partner to the variables of the virtual document; and

a transmitting unit that transmits values provided to the variables of the virtual document from the message or document from the first trading partner, to the corresponding metadata of the message or document of the second trading partner.

6.   The system according to claim 5, wherein self-describing markup language format is XML.

7.   The system according to claim 5, wherein the variables of the virtual document are assigned semantic names representative of a type of data to be stored to the variables.

8.   A computer readable data storage medium for an EDI system having program code recorded thereon that is executable by a computer to perform the following steps :

receiving a source data model corresponding to EDI related data, the source data model including metadata;

mapping the metadata of the source data model to corresponding variables of a virtual document; and

mapping the variables of the virtual document to metadata of a target data model,

wherein, when a source message or document is received by the EDI system, the program code is programmed to:

translate the source message or document to obtain its corresponding metadata;

provide the values corresponding to the metadata to the corresponding mapped variables of the virtual document; and

provide the corresponding values of the mapped variables of the virtual document to the corresponding metadata of the target data model.

9. The computer readable data storage medium according to claim 8, wherein the EDI-related data is in a self-describing markup language format.

10. The computer readable data storage medium according to claim 9, wherein the self-describing markup language format is XML.

11. The computer readable data storage medium according to claim 8, wherein the variables of the virtual document are assigned semantic names representative of a type of data to be stored to the variables.

12. A system for automatically generating data in a self-describing markup language format from received EDI data, comprising:

receiving means for receiving a message or document from a first trading partner as EDI data;

a virtual document that maps metadata from the message or document of the first trading partner to variables of the virtual document, and that maps metadata from a message or document of a second trading partner to the variables of the virtual document; and

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transmitting means for transmitting values provided to the variables of the virtual document from the message or document from the first trading partner, to the corresponding metadata of the message or document of the second trading partner.

13.   The system according to claim 12, wherein self-describing markup language format is XML.

14.   The system according to claim 12, wherein the variables of the virtual document are assigned semantic names representative of a type of data to be stored to the variables.

15.   A method for automatically generating data in a prescribed format from a received EDI document or message having metadata elements, comprising:

pulling values assigned to the metadata elements of the received EDI document or message to variables of a virtual document, based on a source document-to-virtual document mapping; and

pushing values assigned to the variables of the virtual document to metadata elements of a target EDI document or message, based on a target document-to-virtual document mapping.

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